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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,370	12/04/2003	Karen Luke	HES	6991
28857	7590	11/04/2005	2000-IP-002115U1P1P	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			EXAMINER SUCHFIELD, GEORGE A	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,370

Applicant(s)

LUKE ET AL.

Examiner

George Suchfield

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) 47-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 10-29 and 34-46 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9 and 30-33 is/are objected to.
- 8) ☒ Claim(s) 1-65 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/23/03; 5/14/04; 7/1/04; 9/24/04; 10/26/04;
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

10/6/05
4/2/05;
4/4/05;
2/14/05;
10/26/04;

Art Unit: 3676

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-46, drawn to a method of sealing a wellbore, classified in class 166, subclass 292.
 - II. Claims 47-65, drawn to a composition, classified in class 507, subclass 140.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the composition or product could be used as a fracturing fluid for fracturing a well, or in a surface soil consolidation or remediation process. Also, the composition appears to possess utility as a thickener in a coating or plastic formulation.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Craig Roddy on October 3, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-46. Affirmation of this election must be made by applicant in replying to this Office action. Claims 47-65 stand

Art Unit: 3676

withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 4, 8, 10-15, 19-22, 25, 26, 29, 34-37 and 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Terry et al (5,711,383).

Terry et al discloses a process for drilling a well with a drilling mud, followed by, in one embodiment, circulation of a wellbore treating or completion fluid comprising a zeolite wherein the fluid contacts the drilling fluid or mud remaining in the wellbore, e.g., in the form of a filter cake, and reacts therewith for forming a mass or seal in the wellbore, as called for in independent claims 1 and 25. Further with respect to claim 25, and also claims 8, 14, 15, 26, Terry et al further discloses that the set or consolidated drilling fluid and treating fluid filter cake “fills and

Art Unit: 3676

plugs zones of lost circulation encountered”, such as highly permeable zones and fractured zones.

As per claims 10-12 and 34-36, both the drilling fluid and subsequently-injected treating/completion fluid are aqueous or water based. The amount or weight range of aqueous medium or water recited in claims 13 and 37 appears encompassed, overall, by the well completion fluids utilized in Terry (note the examples).

As per claims 19 and 41, the well treating or completion fluid circulated in the process of Terry et al may further include an activator for the zeolite.

As per claims 20 and 42, the specific amount or range of activator, which may be as low as 1% by weight appears encompassed, overall, by the corresponding amount(s) of activator utilized in Terry et al (note the examples).

As per claims 21, 22, 43 and 43, Terry et al may utilize calcium hydroxide, i.e., lime, as the activator component with the amount or range of which, appears encompassed, overall, by the corresponding amount(s) of activator utilized in Terry et al (note the examples).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 16-18 and 38-40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Terry et al (5,711,383).

It is deemed that the concentration ranges of zeolite in the well completion fluid recited in these claims, such as “5% to about 75% by weight” are deemed encompassed by the

corresponding amount of cementitious material, such as zeolite, present in the well treating/completion fluid circulated in the process of Terry et al, i.e., “about 5 pounds to about 250 pounds per barrel” (col. 5, lines 8-20). Alternatively, to employ such ranges of zeolite in the well treating/completion fluid circulated in the process of Terry et al would have been an obvious matter of choice or design based on, e.g., the actual well bore environment and/or penetrated formation(s) characteristics encountered in the field.

11. Claims 2, 3, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al (5,711,383).

As per claims 2, 3, 27, 28 Official notice is taken that the specific zeolites listed in claims 3, 28, such as analcime, and/or those encompassed by the zeolite formula of claims 2 and 27 are conventional and well-known zeolites. Accordingly, it would have been an obvious matter of choice or design to one of ordinary skill in the art to which the invention pertains, to select one of such specific zeolites for use in the well drilling and cementing process of Terry et al, based on relative availability or cost effectiveness.

12. Claims 23, 24, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al (5,711,383), as applied to claims 1 and 25 above, and further in view of Blezard et al (5,964,692).

Blezard et al (note col. 1, lines 46-51; col. 2, lines 18-28; col. 8, lines 19-28; col. 12, lines 22-32 and col. 13, lines 59-67) discloses an exemplary fluid system, such as a drilling fluid, which contains zeolite, along with a surfactant which enhances the suspension of the zeolite in the drilling fluid.

Accordingly, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to similarly include a surfactant in the well treatment/completion fluid circulated in the process of Terry et al, as taught by Blezard et al, in order to enhance the suspension and dispersion of the zeolite component in such well treatment/completion fluid.

As per claims 24 and 46, one or more of the particular surfactants recited appear to be encompassed by, or fall within, the corresponding cationic surfactants which can be utilized by the modified process of Terry et al (note Blezard et al at col. 10, lines 40-60). For example, both cocoalkyltrimethylammonium chloride and trimethyltallowammonium chloride surfactants recited in claims 24 and 46 appear to fall within the overall category of cationic surfactant in Blezard et al of quaternary amines having at least one long chain (fatty) alkyl or alkenyl group with the remainder of the four substituents comprising short chain alkyl groups.

It is further noted with respect to claims 23, 24, 45 and 46 that Blezard et al also teaches in their discussion of the prior art (note col. 7, lines 4-21) that, surfactants have been routinely included in drilling fluid formulations or muds as emulsifying and dispersing agents.

Accordingly, Blezard et al is deemed to alternatively teach the inclusion of a surfactant in a drilling fluid, such as utilized by Terry et al in both the drilling and well completion fluid, which is formulated from drilling fluid, as being routine practice in the prior art.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Other references cited disclose processes of drilling and/or completing a well, including the use of a zeolite in the circulated fluid(s).

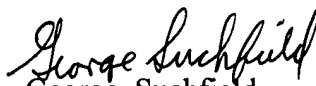
Art Unit: 3676

14. Claims 5-7, 9, and 30-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Suchfield whose telephone number is 571-272-7036. The examiner can normally be reached on M-F (6:30 - 3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


George Suchfield
Primary Examiner
Art Unit 3676

October 29, 2005